

What is claimed is:

1. A pedestal mountable on a first support structure for carrying a second support structure in spaced relation to the first support structure, the pedestal comprising:

an elongate post;

a base releasably fixed to said post and comprising a substantially annular flange, a central plateau surrounded by and stepped up from said substantially annular flange and having a central opening, at least one tongue on said plateau extending into said central opening, and a rim protruding from said substantially annular flange and spaced radially outboard of said plateau;

a spider fixed at an end of said post and having at least one radially outwardly extending leg, said post having a first circumferential position with respect to said base in which said at least one leg of said spider is located in said base central opening circumferentially offset from said at least one tongue, said post having a second circumferential position with respect to said base in which said at least one leg of said spider snugly underlies and is axially trapped by said at least one tongue, said first and second post positions being circumferentially spaced, one of said at least one tongue and at least one leg having a circumferentially extending ramp surface tightly camingly engaged with an opposed surface of an other of said at least one tongue and at least one leg in said post second position, said leg in said post second position axially tightly abutting said plateau, said tongue tightly abutting said opposed surface in said second position; and

an annular member sleeved on and axially movable on said post, said member having a first axial position

relatively distant from said spider and a second axial position adjacent a lateral plane of said spider and engaging said base, in ramp surface/opposed surface disengagement inhibiting relation.

2. The apparatus of Claim 1 in which said annular flange and said plateau are joined by an axially extending step, said flange has a plurality of circumferentially spaced fastener holes, and said central opening has a peripheral edge defined by a plurality of said tongues circumferentially separated by a plurality of circumferentially extending notches.

3. The apparatus of Claim 1 in which said post comprises an elongate rigid tube and a generally cup shaped end cap on an end of said tube, said end cap having an outside circumferential surface.

4. The apparatus of Claim 3 in which said generally cup shaped end cap has an end wall adjacent said end of said post and radially inner and outer peripheral walls extending substantially axially from said end wall and toward an intermediate part of said post, said peripheral walls being radially spaced by an annular groove open axially toward said intermediate part of said post, and said end of said tube being snugly and fixedly received in said groove.

5. The apparatus of Claim 1 in which said spider has a plurality of circumferentially spaced legs with said generally circumferentially extending ramp surface being on selected ones of said legs, a central locator opening, and fastener holes radially interposed between said central locator opening and legs.

6. The apparatus of Claim 5 in which said post has a central locator protrusion engagable in said spider central locator opening and centering said spider on an end of said post.

7. The apparatus of Claim 1 wherein said base includes at least two said tongues circumferentially separated by a notch, said annular member comprising a slider axially slidably mounted on said post, said slider including a substantially annular carrier and at least one block fixed on said carrier and extending therefrom toward said base, said block in said second axial position being seated in said notch circumferentially between said at least two tongues.

8. The apparatus of Claim 1 in which said post has a radially outwardly extending rib axially opposing said annular member and blocking displacement of said annular member axially therepast, said annular member being located on said post between said rib and said post end.

9. The apparatus of Claim 1 in which said post has a threaded portion adjacent said spider, said annular member comprising a nut threaded on said post threaded portion, said nut in said first axial position being threaded relatively distantly from said spider and in said second axial position being threaded nearer to said spider, said nut in said second axial position snugly engaging said base so that said base is tightly gripped between said spider and nut.

10. The apparatus of Claim 9 in which said nut and said base have a frictionally engaging interface

frictionally holding said nut in said second axial position.

11. The apparatus of Claim 10 wherein said nut has a generally cup-shaped end portion opening toward said base and including a central recess surrounded by a skirt extended toward said base, said recess being of greater axial extent than said axial stepping of said plateau from said base flange.

12. A pedestal mountable on a first support structure for carrying a second support structure in spaced relation to the first support structure, the pedestal comprising:

an elongate post;

a base releasably fixed to said post and comprising a substantially annular flange, a central plateau surrounded by and stepped up from said substantially annular flange and having a central opening, at least one tongue on said plateau extending into said central opening, and a rim protruding from said substantially annular flange and spaced radially outboard of said plateau;

a spider fixed at an end of said post and having at least one radially outwardly extending leg, said post having a first circumferential position with respect to said base in which said at least one leg of said spider is located in said base central opening circumferentially offset from said at least one tongue, said post having a second circumferential position with respect to said base in which said at least one leg of said spider snugly underlies and is axially trapped by said at least one tongue, said first and second post positions being circumferentially spaced, one of said at least one tongue

and at least one leg having a circumferentially extending ramp surface tightly camingly engaged with an opposed surface of an other of said at least one tongue and at least one leg in said post second position, said leg in said post second position axially tightly abutting said plateau, said tongue tightly abutting said opposed surface in said second position; and

a nut threaded on said post threaded portion, said nut having a first axial position threaded relatively distantly from said spider and a second axial position threaded nearer to said spider, said nut in said nut second position snugly engaging said base so that said base is tightly gripped between said spider and nut.

13. The apparatus of Claim 12 in which said annular flange and plateau are joined by an axially extending annular step, said flange having circumferentially spaced fastener holes, said central opening having a peripheral edge defined by a plurality of said tongues circumferentially separated by a plurality of circumferentially extending notches.

14. The apparatus of Claim 13 wherein said nut has a generally cup-shaped end portion opening toward said base and including a central recess surrounded by a skirt extending toward said base, said recess being of greater axial extent than said axial stepping of said plateau from said base flange.

15. The apparatus of Claim 12 in which said post comprises an elongate rigid tube and a generally cup shaped end cap on an end of said tube, said end cap having an outside circumferential surface defining said threaded portion of said post.

16. The apparatus of Claim 15 in which the generally cup shaped end cap has an end wall adjacent an end of a post and radially inner and outer peripheral walls extending substantially axially from the end wall and toward an intermediate part of said post, said threaded portion of said post comprising threads on said outer peripheral wall, said peripheral walls being radially spaced by an annular groove open axially toward an intermediate part of said post, and said end of said tube being snugly and fixedly received in said groove.

17. The apparatus of Claim 12 in which said spider has a plurality of circumferentially spaced legs with said generally circumferentially extending ramp surface being on selected ones of said legs, a central locator opening, and fastener holes radially interposed between said central locator opening and legs.

18. The apparatus of Claim 17 in which said post has a central locator protrusion engagable in said spider central locator opening and centering said spider on an end of said post.

19. The apparatus of Claim 12 in which said nut has a peripheral surface tapered away from said base, a textured hand engagable area, a narrow end facing away from said base, and a wide end facing toward said base and recessed to clear said plateau, said wide end having a skirt bounding said recess and of axial length to frictionally engage said base flange.

20. The apparatus of Claim 12 in which said post has a radially outwardly extending rib axially opposing

said nut and blocking displacement of said nut axially therepast, said nut being located on said post between said rib and said post end.

21. A pedestal mountable on a first support structure for carrying a second support structure in spaced relation to the first support structure, the pedestal comprising:

an elongate post;

a base releasably fixed to said post and comprising a substantially annular flange, a central plateau surrounded by and stepped up from said substantially annular flange and having a central opening, at least one tongue on said plateau extending into said central opening, and a rim protruding from said substantially annular flange and spaced radially outboard of said plateau;

a spider fixed at an end of said post and having at least one radially outwardly extending leg, said post having a first circumferential position with respect to said base in which said at least one leg of said spider is located in said base central opening circumferentially offset from said at least one tongue, said post having a second circumferential position with respect to said base in which said at least one leg of said spider snugly underlies and is axially trapped by said at least one tongue, said first and second post positions being circumferentially spaced, one of said at least one tongue and at least one leg having a circumferentially extending ramp surface tightly cammingly engaged with an opposed surface of an other of said at least one tongue and at least one leg in said post second position, said leg in said post second position axially tightly abutting said

plateau, said tongue tightly abutting said opposed surface in said second position; and

a slider axially slidably mounted on said post, said slider having a first axial position relatively distant from said spider and a second axial position adjacent a lateral plane of said spider and engaging said base, said slider including a substantially annular carrier and at least one block fixed on said carrier and extending therefrom toward said base in said second position.

22. The apparatus of Claim 21 in which said annular flange and said plateau are joined by an axially extending step, said flange having circumferentially spaced fastener holes, said central opening having a peripheral edge defined by a plurality of said tongues circumferentially separated by circumferentially extending notches.

23. The apparatus of Claim 21 in which said post comprises an elongate rigid tube and a generally cup shaped end cap on an end of said tube, said end cap having an outside circumferential surface.

24. The apparatus of Claim 23 in which said generally cup shaped end cap has an end wall adjacent said end of said post and radially inner and outer peripheral walls extending substantially axially from said end wall and toward an intermediate part of said post, said peripheral walls being radially spaced by an annular groove open axially toward said intermediate part of said post, and said end of said tube being snugly and fixedly received in said groove.



25. The apparatus of Claim 21 in which said spider has a plurality of circumferentially spaced legs with said generally circumferentially extending ramp surface being on selected ones of said legs, a central locator opening, and fastener holes radially interposed between said central locator opening and legs.

26. The apparatus of Claim 25 in which said post has a central locator protrusion engagable in said spider central locator opening and centering said spider on an end of said post.

27. The apparatus of Claim 21 wherein said base includes at least two said tongues circumferentially separated by a notch.

28. The apparatus of Claim 27 in which said post has a radially outward extending rib axially opposing said slider and blocking displacement of said slider axially therepast, said slider being located on said post between said rib and said post end.

29. A pedestal mountable on a first support structure for carrying a use structure in spaced relation to the first support structure, the pedestal comprising:

an elongate post;

a connector member comprising a substantially annular flange, a central plateau surrounded by and stepped from said flange and having a central passage, a step in said passage and facing generally away from said plateau, said passage being sized to snugly axially receive an end portion of said post;

a radially outwardly extending protrusion fixed on said post opposing said plateau and defining a limit to

axial displacement of said connector member toward an intermediate part of said post; and

a latch axially fixed on said post and located to engage said step and maintain said connector member against unintended displacement off said post.

30. The apparatus of Claim 29 in which at least one of said latch and said step is releasably radially shiftably mounted and has a displacement direction away from an other of said step and said latch to allow removal of said connector member from said post.

31. The apparatus of Claim 30 including an axially opposed pair of said steps, said steps being substantially annular and defined by a substantially annular groove in said passage, said latch being a leaf spring fixed on said post inboard of said connector member, said passage having a slot extending from said groove through said central plateau but of lesser radial depth than said groove, said slot being of circumferential width exceeding the circumferential width of said leaf spring, said leaf spring extending through said slot and having a radial protrusion receivable in said annular groove and resiliently radially outwardly pressed thereinto, said protrusion being radially resiliently spaced outward from said post, said protrusion cooperating with said opposed steps to axially locate the said connector member axially on said post.

32. A pedestal mountable on an environmental surface for carrying an object support spaced from the environmental surface, the pedestal comprising:

an elongate post;

a base mountable on an environmental surface and having an opening defining a notch and a tongue extending into said opening beside said notch;

said post having a generally radially extending portion in turn having a first position with said portion inserted in said notch and having a second position with said portion axially trapped behind said tongue, said first and second post positions being laterally offset; and

an annular member sleeved on and axially movable on said post, said member having a first axial position relatively distant from said portion and a second axial position engaging said base, in portion/tongue disengagement inhibiting relation.

33. The apparatus of Claim 32 wherein said annular member comprises a slider axially slidably mounted on said post, said slider including a substantially annular carrier and at least one block fixed on said carrier and extending therefrom toward said base, said block in said second axial position occupying said notch and blocking displacement of said portion from behind said tongue.

34. The apparatus of Claim 32 in which said post has a threaded portion adjacent said generally radially extending portion, said annular member comprising a nut threaded on said post threaded portion, said nut in said first axial position being threaded relatively distantly from said radially extended portion, said nut in said second axial position snugly engaging said base so that said base is tightly gripped between said generally radially extended portion and nut.